Bicycle Policy Statements - Summary

The City will separate pedestrian and bicycle travel on multi-use path facilities wherever possible through the use of path marking, signs or construction of separate facilities. (1989 TMP)

The City will ensure that all streets are made safe and accessible to bicycles and will consider bicycle needs in all road projects. (1989 TMP)

The City will develop a continuous bicycle system through the designation of a system of Primary and Secondary Corridors.

The City will actively work to complete the corridor network through a combination of CIP funding, federal funding, street projects and opportunities which arise through the development and redevelopment process.

The City will coordinate with Boulder County, the University of Colorado, the Boulder Urban Renewal Authority (BURA), neighborhood plans, City Parks and Recreation Department, the Open Space Department and other government entities and plans to ensure that all City and County projects connect with and/or help to complete the corridor network.

The City will use the preferred standard for bicycle lane width whenever possible for new construction. The City will use road construction projects as opportunities to upgrade existing bicycle lanes to meet the new preferred standards.

The City will work with property owners, developers, the BURA, the Boulder Valley School District (BVSD), the Parks and Recreation Department and the University of Colorado to ensure that commercial, public, mixed use and multi-unit residential sites provide direct, safe and convenient internal bicycle circulation oriented along the line of sight from external connections to areas near building entrances and other on-site destinations.

The City will combine education and enforcement efforts to help instill safe and courteous use of the shared public roadway.

The City will collaborate with the Boulder Valley School District (BVSD), the University of Colorado, and private and public driving schools to better educate students on how to properly share the road with bicyclists, pedestrians and users of transits.

The City will develop a strong “Share the Road” public education campaign to foster increased courtesy and respect among all modes.

The City will work with Boulder County, the Denver Regional Council of Governments (DRCOG), and other city governments to ensure that bicycle facilities or adequate shoulders are included in all road construction projects.

The City will work with RTD, Boulder County and other city governments to provide bicycle lockers or secure, covered bicycle parking at all transit centers and Park ‘n’ Ride facilities within the region.

The City will work with RTD to ensure that all Boulder transit routes accommodate bikes on buses by 1996.

6.2 Bicycle System Plan

introduction

The Bicycle System Plan is one element of the mobility and access section of the 1995 update of the Transportation Master Plan (TMP). The Bicycle System Plan itself is a separate document which contains detailed information on the development of the bicycle system. The main components and policy statements from the Bicycle System Plan have been summarized and presented in this section of the TMP.

The Bicycle System Plan establishes a long-term plan for the development of a continuous bicycle network by identifying cross-town corridors and recommending those projects necessary to complete each corridor. In addition to specific recommendations for improvements to the physical system, the plan discusses general bicycling issues at various types of intersections and at destination areas, such as schools, transit centers and commercial areas.

The Bicycle System Plan also addresses the other components necessary to make the bicycle a viable commute option. These include the maintenance of existing facilities, the development of intermodal and regional connections, encouragement and demand management programs, and education and enforcement efforts.

The Bicycle System Plan will play a key role in the development of a multimodal transportation system.

purpose

The purpose of the Bicycle System Plan is to help the City achieve the stated goals and objectives of the Transportation Master Plan. These objectives include increasing the bicycle mode share at least 4% between 1994 and the year 2020. In real terms, this translates into doubling the total number of bicycle trips from 80,000 to 160,000.

goals and policy statements

The goals of the Bicycle System Plan are designed to help the City meet the overall objectives of the TMP Update. These goals are:

- To increase bicycle mode share by at least 4% by the year 2020.
- To develop a mechanism for gathering continued input from the public on the bicycle system and to establish partnerships with various entities within the City and County in order to develop and improve the bicycle system.
- To develop a continuous bicycle system with access to major destination areas and to maintain the system so that it provides safe and convenient travel.
- To design and construct bicycle facilities in ways that encourage bicycle riding, provide for safer interaction with other modes, and better integrate bicyclists into the roadway system.
- To develop an urban form which is characterized by people-oriented land use patterns and which enables people to walk or ride their bicycles to destination areas.
- To complete the missing links in the regional system and to provide continuous bicycle facilities and good bicycle-transit integration between the City of Boulder and her neighboring cities.
- To develop local recognition of the bicycle as a legitimate form of transportation.
- To increase transportation safety for all modes through education and enforcement efforts.

The policy statements listed throughout the Bicycle System Plan provide the concrete guidelines for achieving these goals. Key policy statements from the Bicycle System Plan have been summarized in this section.

background

1989 TMP - Status of Progress

The 1989 TMP "Bicycle System Plan" section proposed a complete bicycle network that would "allow convenient and safe bicycle travel throughout the Boulder Valley as a viable alternative to the automobile." A project list of Priority I and Priority II projects was developed, with the Priority I projects designated for completion within 10 years.

Significant progress has been made since the 1989 TMP was adopted. About 10.5 miles of on-street bicycle lanes have been added to the system, along with 8 - 10 miles of off-street paths and the construction of 15 underpasses, which have been listed in section 6.1.

The 1989 TMP further recommended that a continuous bicycle network be developed and that the details of the network be specified as to the type of bikeway proposed, the effects these would have on intersections and the projected project costs.

The Bicycle System Plan builds on the recommendations and progress made by the 1989 TMP by establishing continuous bicycl network based on the corridor concep Tables and diagrams of neede improvements to the physical system have been developed which incorporate th remaining Priority I and Priority II projects into the Primary and Secondary Corridor system. The tables are designed not only to provide detailed project information but to coordinate efforts between various government entities and subcommunity groups in order to establish a continuous and well-connected bicycle network.

bicycling in boulder

The bicycle is often portrayed as a symbol of the healthy community and lifestyle which can be found in Boulder. On any given day, a diverse mix of bicycle commuters, bicycle racers and recreational cyclists can be seen riding the streets and paths of Boulder. Boulder has developed an image as a city in which the individual can incorporate exercise into his or her daily routine by bicycling to work, by running errands, or for recreation.

Boulder also has a long and continuing history

figure 6-8. FHWA: national bicycling and walking study

Factors influencing the use of the bicycle include:

- perception of safety;
- trip distance;
- the attitude towards bicycling expressed at the workplace;
- situational constraints, such as the need to transport children or heavy objects;
- weather or terrain;
- the type of bicycle facilities available;
- the continuity and directness of the bicycle facilities;
- the level of access to bicycle facilities and destination areas;
- the level of support facilities provided at destination areas, such as bicycle parking, showers and changing areas.

of bicycle racing. The names of Boulder's bicycle racing champions and events are known throughout the world. Many of the top cyclists and triathletes from around the world continue to train in Boulder either as full- or part-time residents.

Nonetheless, as both the City of Boulder and Boulder County continue to grow, conflict increases over the shared use of public right-of-way and space. Many parts of town do not have bicycle facilities and are difficult or intimidating for cyclists to access. County roads often do not have shoulders and bicyclists compete poorly with the now steady stream of automobile traffic which dominate these important regional connections. Motorists arriving in Boulder from other parts of the country or state are often not accustomed to the mix of traffic found on Boulder's streets and are not aware of how to share the road with other users.

The FHWA study reports that the most commonly cited reason for not bicycling was fear of safety in traffic. The study recommends that the real or perceived safety of the bicycle system be addressed in a number of ways. These include the provision of alternative routes and facilities to high volume roadways, the provision of adequate on-street bicycle facilities, and the use of education, enforcement and traffic calming techniques to improve traffic safety in general.

national cycling data

The National Bicycling and Walking Study produced by the Federal Highway Administration (Publication Number: FHWA-PD-94-023) emphasizes the need for an integrated approach to bicycle planning in order to address the multiple aspects which affect mode choice.

The FHWA study found that multiple factors were involved with the individual's decision to bicycle. These factors include those listed in figure 6-8.

The FHWA study reports that the most commonly cited reason for not bicycling was fear of safety in traffic. The study recommends that the real or perceived safety of the bicycle system be addressed in a number of ways. These include the provision of alternative routes and facilities to high volume roadways, the provision of adequate on-street bicycle facilities, and the use of education, enforcement and traffic calming techniques to improve traffic safety in general.

The study recommends the creation of a continuous bicycle network with access to all areas of the city and improved connections to the transit system. The study also recommends changes to transportation and land use planning which would encourage development which offers a mix of uses in close proximity to one another and a well-integrated multimodal transportation system.

public input

Throughout development of the Bicycle System Plan, public input has provided valuable insight into the various aspects of the bicycle trip. The Mobility Subcommittee of the Transportation Advisory Board (TAB) hosted a total of four public workshops between the Fall of 1994 and the Fall of 1995. About 30 people attended each session, including representatives of community groups, businesses, cycling organizations, the University of Colorado, the Regional Transportation District (RTD) and interested citizens. Suggestions made in the initial roundtable workshops are summarized in figure 6-9.

Two focus group meetings were also hosted to gain insight into what elements of the bicycle system could be improved to encourage people who do not currently ride their bicycles for transportation to do so. One was held for business employees who do not use bicycles for commute purposes, and one was held for middle school students and their parents.

In addition, two local advocacy groups, the Citizens for Alternative Transportation Systems (CATS) and The Bolder Bicycle Commuters (BBC) have provided valuable information and recommendations throughout the process. The project list developed through extensive work and research by the BBC provided the basis for the corridor tables. And finally, members of the City's Trail Committee offered their time and attention to provide additional public insight and feedback into the development of the plan.

subcommunity, city and regional plans

Various subcommunity, City and regional plans were referenced in the development of the Primary and Secondary Corridor Tables and other aspects of the Bicycle System Plan in an effort to incorporate the bicycling elements of existing plans and to coordinate with plans currently in progress.

As other subcommunities within the City of Boulder work to define priorities for their neighborhoods, the corridors identified in the Bicycle System Plan can provide a basic framework around which future bicycle facilities within the community can be designed to connect with.

the physical system and the corridor network

system approach - need and purpose

While the City of Boulder has built an extensive array of bicycle facilities, the effectiveness of the bicycle system as a whole is limited by missing links and other discontinuities which disrupt bicycle travel or place bicyclists in difficult situations. Without a definitive, long-term plan for a continuous system, there is no way for the City to ensure that, on a project-by-project basis, bicycle improvements will result in a continuous bicycle system.

figure 6-9. roundtable suggestions for the city

- The City should continue to develop a dual system of bike lanes and paths to provide options for a wide range of cyclists;
- regional and inter-modal connections should be improved;
- more directional signage should be installed;
- bicycle facilities should be incorporated into the development process;
- both the availability and security of bicycle parking should be increased;
- safety and awareness should be increased by offering education programs for cyclists and drivers and by increasing enforcement efforts;
- the City should work with employers, retailers and manufacturers to provide incentives to bicycling and other alternatives and to make bicycling more convenient;
- parking pricing strategies should be employed to make drivers "pay their way" and to encourage use of alternatives; and,
- Boulder should develop a good "bikes on buses" program.

Public input has lent further support to the system approach. Feedback from the roundtable meetings and other public forums repeatedly emphasized the need to address the discontinuities of the physical system. These discontinuities are listed in figure 6-10. To resolve these discontinuities, the City will not only need to establish a continuous network of bicycle facilities but will also need to improve regional and intermodal connections, enhance maintenance, update design standards and guidelines and address destination access issues.

The purpose of the system approach is to enable the City to develop a continuous and well-connected bicycle system by establishing a long-term plan for the physical system and by maintaining a strong focus on support programs.

The corridor concept provides the basic framework by which the City will address the discontinuities of the physical system.

corridor network

Improvements to the physical system are based on a network of Primary and Secondary Corridors. This network has been designed to provide continuous cross-town facilities with access to major destination areas. While all streets should be accessible to bicycles, these bicycle corridors will provide a core system of continuous, well-maintained and well-signed facilities.

Corridors may encompass an area generally defined as one block to either side of a spine facility, which is the street around which the corridor is based. Facilities within these corridors may be comprised of on-street lanes, off-street multi-use paths, or both. The basis of the corridor concept is to provide mobility along the entire length of the corridor through both on- and off-street facilities.

Primary Corridors are generally defined by the street arterial system and are spaced at least one per mile on an east-west and north-south grid. Primary Corridors will receive some priority in funding allocation and in facility maintenance. Secondary Corridors generally rely on residential streets to provide bike routes and facilities on lower volume streets. Secondary Corridors also provide for more ridable distances between the Primary Corridors. The Primary and Secondary Corridors are listed in figure 6-11.

A complete set of corridor tables and diagrams have been developed which specify the improvements needed along the entire length of each corridor.

figure 6-10. discontinuities of the physical system

- Missing links within the City where existing facilities end and do not continue across town;
- intersections or street crossings where it is difficult to cross a street or maneuver through an intersection;
- parking lots or other obstacles which make it difficult to traverse the area between a bicycle facility and a specific destination;
- destination areas where adequate bicycle parking or storage facilities do not exist;
- missing links along regional connections where County facilities do not exist; and,
- the interface between the bicycle system and the transit system where it is difficult to connect a transit trip to a bicycle trip.

Corridor completion will be achieved through a combination of City-funded projects, street projects and opportunities which arise through the development and redevelopment process. Future projects will be drawn from the corridor tables until corridor completion is achieved. Based on public input and development opportunities, a prioritized project list will be drawn from the tables for completion within the next five years. Policies for the physical system are listed in figure 6-12.

greenways

The Greenways Master Plan serves the diverse functions of providing flood control projects, restoring and protecting riparian habitat and water quality and building paths for both recreational an transportation purposes. The extensive network of Greenways path which has been developed provides a unique opportunity for travel along riparian corridors. For many, they offer the opportunity to ride away from traffic and to interact with a more natural and human scale environment on a daily basis.

At the same time, the great popularity of the Greenways paths has resulted in conflict between cyclists pedestrians, joggers, in-line skaters and dogs being taken for a walk. To help remedy the situation, the City continues to widen paths, to add parallel soft surface paths, and to separate bicycle and pedestrian facilities where possible.

Completion of the corridor network will help reduce pressure on the Greenways system by providing parallel facilities and increasing the options available to cyclists who prefer more linear travel. Greenways will nonetheless remain important for those cyclists who opt to ride away from traffic or who ride primarily because they enjoy the human and natural interactions which the Greenways paths provide.

figure 6-11. primary and secondary corridors

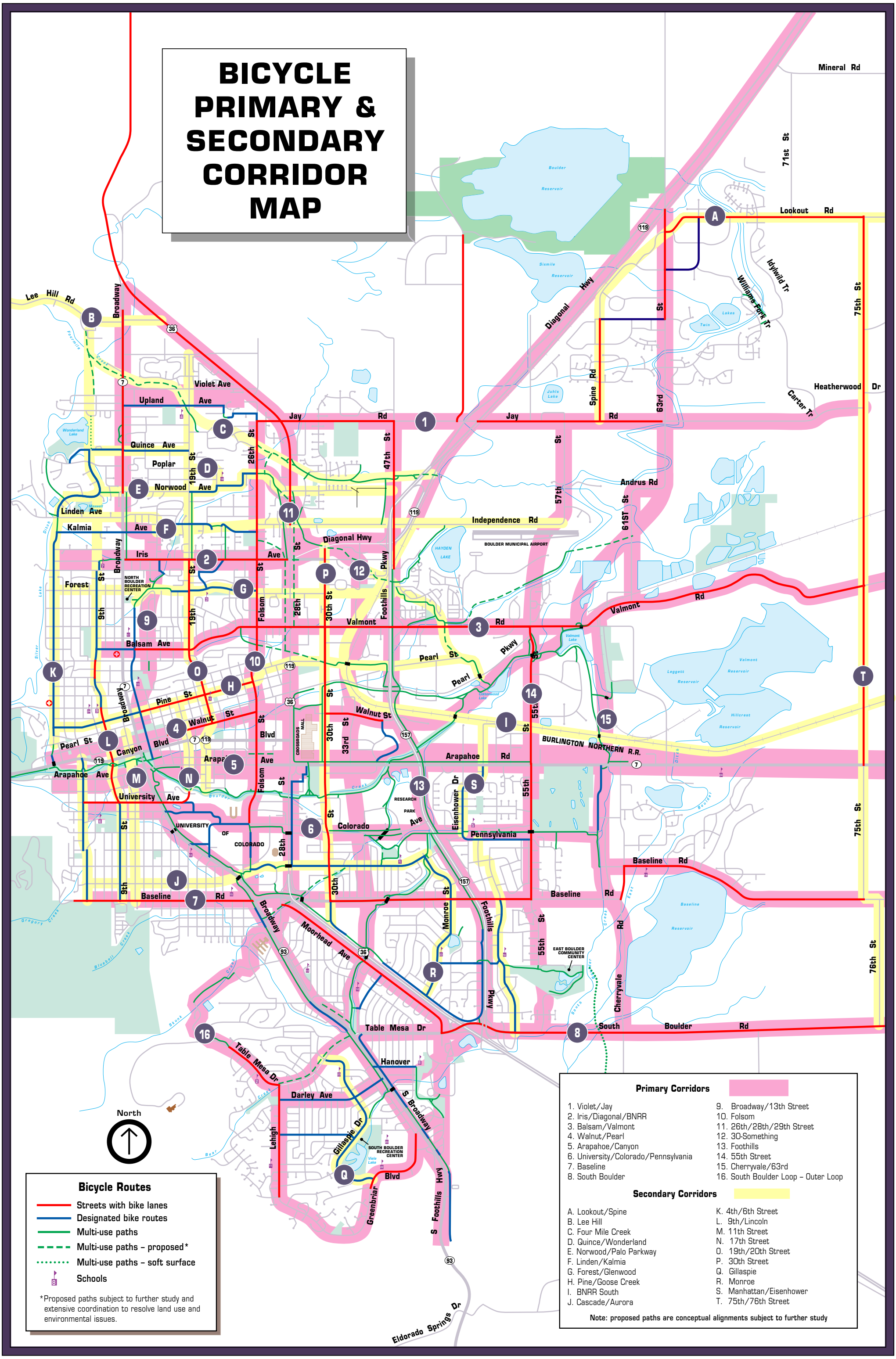
primary corridors

east-west	*north-south*
Violet / Jay	Broadway / 13th Street
Iris / Diagonal / BNRR	Folsom
Balsam / Valmont	26th / 28th / 29th Street
Walnut / Pearl	30-Something
Arapahoe / Canyon	Foothills
University / Colorado	55th Street
Baseline	Cherryvale / 63rd
Table Mesa / South Boulder	South Boulder Loop

secondary corridors

east-west	*north-south*
Spine / Lookout	4th / 6th Street
Lee Hill	9th / Lincoln
Four Mile Creek	11th Street
Quince / Wonderland	17th Street
Norwood / Palo Parkway	19th / 20th Street
Linden / Kalmia	30th Street
Forest / Glenwood	Gillaspie
Pine / Goose Creek	Monroe
BNRR- South	Manhattan / Eisenhower
Cascade / Aurora	75th / 76th Street

BICYCLE PRIMARY & SECONDARY CORRIDOR MAP



Bicycle Routes

- Streets with bike lanes
- Designated bike routes
- Multi-use paths
- Multi-use paths – proposed*
- Multi-use paths – soft surface
- Schools

*Proposed paths subject to further study and extensive coordination to resolve land use and environmental issues.

Primary Corridors

1. Violet/Jay
2. Iris/Diagonal/BNRR
3. Balsam/Valmont
4. Walnut/Pearl
5. Arapahoe/Canyon
6. University/Colorado/Pennsylvania
7. Baseline
8. South Boulder
9. Broadway/13th Street
10. Folsom
11. 26th/28th/29th Street
12. 30-Something
13. Foothills
14. 55th Street
15. Cherryvale/63rd
16. South Boulder Loop – Outer Loop

Secondary Corridors

A. Lookout/Spine
B. Lee Hill
C. Four Mile Creek
D. Quince/Wonderland
E. Norwood/Palo Parkway
F. Linden/Kalmia
G. Forest/Glenwood
H. Pine/Goose Creek
I. BNRR South
J. Cascade/Aurora
K. 4th/6th Street
L. 9th/Lincoln
M. 11th Street
N. 17th Street
O. 19th/20th Street
P. 30th Street
Q. Gillaspie
R. Monroe
S. Manhattan/Eisenhower
T. 75th/76th Street

Note: proposed paths are conceptual alignments subject to further study

maintenance

While the Street Maintenance department will continue to improve on existing maintenance practice City wide, the City will also establish an optimal level of maintenance along the Primary Corridors to ensure a core network of well maintained facilities which can be relied on during snow conditions.

The optimal level of maintenance will ensure that at least one facility along every Primary Corridor will be plowed during snow conditions, that all streets with bike lanes will be swept weekly or bi-weekly as part of routine maintenance, and that residential streets within the Primary Corridor system will be swept on a more regular basis.

figure 6-12. physical system policies

The City will separate pedestrian and bicycle travel on multi-use path facilities wherever possible through the use of path marking, signs or construction of separate facilities. (1989 TMP)

The City will ensure that all streets are made safe and accessible to bicycles and will consider bicycle needs in all road projects. (1989 TMP)

The City will construct bicycle facilities on all roads of collector or arterial status. Where it is not possible to construct on-street bicycle lanes on roads of collector or arterial status, the City will construct a wide outside curb lane with a minimum width of 14 feet exclusive of the gutter pan. (1989 TMP)

The City will develop a continuous bicycle system through the designation of a system of Primary and Secondary Corridors.

The City will develop a set of corridor tables and diagrams which will provide detailed information on the improvements needed along each corridor. These tables will be updated every five years.

The City will actively work to complete the corridor network through a combination of CIP funding, federal funding, street projects and opportunities which arise through the development and redevelopment process.

The City will coordinate with Boulder County, the University of Colorado, the Boulder Urban Renewal Authority, neighborhood plans, City Parks and Recreation Department, the Open Space Department and other government entities and plans to ensure that all City and County projects connect with and/or help to complete the corridor network.

The City will use the development review process, the Greenways Master Plan, the Parks and Recreation Master Plan, and other city planning efforts to find new opportunities to provide connections for bicycles to and from the corridor network and to ensure that all development and redevelopment projects incorporate the proposed improvements to the corridor network which are documented in the corridor tables.

The City will continue to work to improve conditions for bicyclists through maintenance practice, equipment and technology.

design standards

Input from the public roundtable meetings, the Trails Committee, the Citizens for Alternative Transportation Systems (CATS) workshop and the Bolder Bicycle Commuters (BBC) suggests that both bicycle lane width standards and general intersection treatment issues are seen as significant factors in affecting the real or perceived safety of the bicycle system and, ultimately, in determining mode choice.

New bicycle lane standards will be adopted as part of this TMP Update and intersection treatment and issues will be addressed.

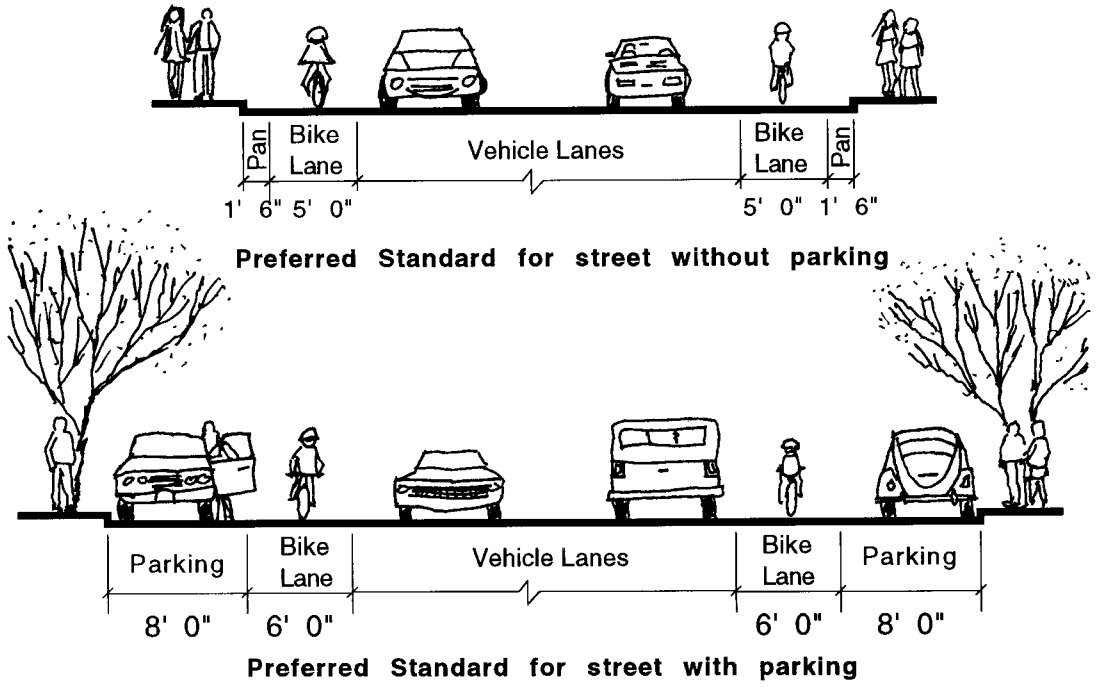
bicycle lane width standards

While maintaining the existing minimum standard, the Bicycle System Plan establishes a new preferred bicycle lane width standard.

A cross-section of the new preferred standard is shown in figure 6-13. The City will use the preferred standard for bicycle lane width whenever possible for new construction. The City will also use road construction projects as opportunities to upgrade existing bicycle lanes to meet the new preferred standards.

For streets without parking, a 5-foot bicycle lane exclusive of the gutter pan is the new preferred standard. Bicycle lane widths

figure 6-13. cross-section of the preferred bicycle lane width standards



greater than 5 feet (exclusive of the gutter pan) create problems because the additional 1 1/2 feet of gutter pan, combined with the bicycle lane width, provides a total width of 6 1/2 feet. This is wide enough for a car to park or maneuver within the bicycle lane.

For streets with parking or without curb and gutter, a 6-foot bicycle lane is the preferred standard. It is possible to use a 6 foot bicycle lane in these circumstances because, without the additional 1 1/2 feet of gutter pan, a 6-foot bicycle lane is still too narrow for use by an automobile.

figure 6-14. curb and gutter pan

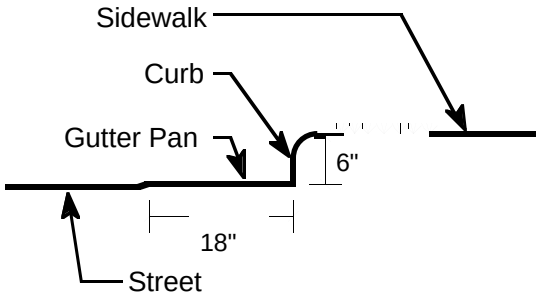


Figure 6-14 shows a typical curb and gutter pan. In this drawing the longitudinal joint between the street and the gutter pan is shown to be uneven, which is how the gutter pan is typically constructed. The City of Boulder, however, will work to ensure that the gutter pan is constructed without an uneven longitudinal joint.

intersection treatment

The Bicycle System Plan also outlines the conflicts which ensue among modes at various intersection configurations and offers solutions to address these conflicts.

These solutions include the use of street markings, signs, raised crosswalks, the reconstruction and reconfiguration of intersection geometry, and the restriction of right turn movements in order to enhance safety of the intersection for all modes and to better inform both cyclists and motorists as to expected travel patterns.

The City will develop standard guidelines for intersection treatment according to intersection conditions, such as traffic volumes, intersection configuration and time of day. General design guideline policies are listed in figure 6-15.

bicycle access

figure 6-15. design guideline policies

The City will use street markings, signs, raised crosswalks, intersection geometry, restricted turn movements, and intersection reconstruction opportunities to improve intersection safety where bicycle facilities intersect with curb cuts or roads. (1989 TMP)

The City will continue to install bicycle-activated loop detectors at every actuated approach to every signal throughout the corridor network. (1989 TMP)

The City will use the preferred standard for bicycle lane width whenever possible for new construction. The City will use road construction projects as opportunities to upgrade existing bicycle lanes to meet the new preferred standards.

accessible urban form

In the 1960s it was recognized that America's cities were building neighborhoods that required people to drive cars for mobility. Since then, cities have become increasingly aware of the importance of urban form as an influencer of travel behavior

Like most cities across the nation, the City of Boulder has also developed an auto-dependent urban form. Some of the features of this form are single-use land use patterns, assignment of most public space to motor vehicle use, assignment of the highest-value private and public space to motor vehicle parking, and incomplete bicycle and pedestrian systems.

The result is an urban form which is inaccessible (and inhospitable) to people on foot or on a bicycle. Achieving a more accessible urban form will require fundamental changes in land use patterns and in the manner in which public space is allocated between modes of travel.

Accessible urban form is characterized by people-oriented land use patterns. This land use pattern is based around well-planned development which incorporates a mixture of uses in close proximity to one another, allowing for shorter trips and enabling people to walk or ride their bicycles to destination areas. Building orientation and circulation patterns are designed around multimodal travel to facilitate access and circulation for all modes. Accessible urban form, in effect, provides people with more options rather than simply requiring them to drive.

destination access

figure 6-16. bicycle access policies

The City will encourage new development and redevelopment projects to provide shower and changing facilities for employees. (1989 TMP)

The City will ensure that bicycle access and circulation are considered in all phases of the planning process.

The City will work with property owners, developers, the Boulder Urban Renewal Authority (BURA), the Boulder Valley School District (BVSD), the Parks and Recreation Department and the University of Colorado to ensure that commercial, public and multi-unit residential sites provide direct, safe and convenient internal bicycle circulation oriented along the line of sight from external connections to areas near building entrances and other on-site destinations.

The City will require all new development and redevelopment projects to provide two bicycle parking racks for every ten automobile spaces.

The City will design a unique system of signs denoting the primary and secondary corridors by name, symbol and/or color, to be placed at regular intervals along these corridors. The City will incorporate internationally recognized symbols into the design.

The City will design a series of "you are here" maps to be placed at all major destination areas and other strategic locations along the primary and secondary corridor system; these maps will include the primary and secondary corridors, existing bicycle facilities and destination areas.

Citizens in the public process workshops consistently identified the need to provide for bicycle access into and around destination areas.

The primary components of destination access are shown in figure 6-17.

All major destinations within the City of Boulder will be served by a Primary or Secondary Corridor. These include commercial areas, the downtown, the University, schools, Parks and Recreation facilities, Open Space trailheads, transit centers and major employment centers.

To further improve bicycle access, every corridor will be named and well signed, so that

figure 6-17. destination access - primary components

general criteria

General criteria for good destination access include the provision of facilities from the external circulation system (the corridor network) through the internal circulation system (often the parking lot) to the bicycle parking area near the destination front.

traversing the area

- **Direct, safe and convenient internal bicycle circulation oriented along the line of sight from external connections to areas near building entrances and other on-site destinations** should be provided at all commercial, public and multi-unit residential sites.
- **Bicycle lanes should be striped through parking areas** along the most direct route from the external circulation system to the destination front, but not behind diagonally parked cars and, if possible, not alongside parallel parked cars. **If it is not possible to stripe bicycle lanes, signs should state shared use of the facility to motorists.**
- **Multi-use path connections should be constructed where it possible to provide more direct routes for cyclists and pedestrians from all approaches to the shopping area**. These facilities should have minimal intersections with automobile traffic. Where intersections are necessary, they should be made highly visible through the use of signage, raised crosswalks, enforcement and other strategies.

bicycle parking

- **Adequate and secure bicycle parking racks should be located near the main entrance of the destination area.** Bicycle parking should be covered wherever possible and, in cases where cyclists are expected to leave bicycles for long periods of time unattended, secure bicycle locker facilities or indoor bicycle parking should be provided.
- **Short-term bicycle parking racks should accommodate the use of the U-type locks**. **Inverted U-Racks are the preferred standard.**

bicyclists can find their way around the bicycle network by the same means that automobile drivers navigate the automobile grid. A series of "you are here" maps placed strategically around the bicycle network will help the cyclist choose the best route to a destination. City policies for bicycle access are listed in figure 6-16.

regional and intermodal connections

The need for regional connections is underscored by recent trends which show that an increasing number of daily vehicle trips that impact Boulder streets have one end outside of Boulder Valley. A growing segment of Boulder employees now commute from neighboring communities. The provision of adequate bicycle facilities between neighboring communities and the City of Boulder would allow for some of these trips to be made by bicycle.

To encourage combined transit and bike trips, every transit center and park and Ride will be served by a Primary or Secondary Corridor. In addition, the bikes on buses program will be expanded and made more convenient and bicycle access and storage facilities at transit centers will be improved. The ability to transport a bicycle on a bus will greatly enhance the mobility provided by the transportation system. Finally, intermodal travel will continue to become more attractive as general improvements to transit service are made. City policies for regional and intermodal connections are shown in figure 6-18.

promotion and tdm programs

figure 6-18. regional and intermodal connections policies

The City will ensure that every regional facility planned or already developed by Boulder County is connected to a Primary and Secondary Corridor.

The City will ensure that every transit center and park and Ride facility is connected to a Primary and Secondary Corridor.

The City will work with Boulder County, the Denver Regional Council of Governments (DRCOG), and other city governments to ensure that bicycle facilities or adequate shoulders are included in all road construction projects.

The City will work with the Regional Transportation District (RTD), Boulder County and other city governments to provide for direct bicycle access from the corridor network to the bicycle parking area at all transit centers and park and Ride facilities throughout the region.

The City will work with RTD, Boulder County and other city governments to provide bicycle lockers or secure, covered bicycle parking at all transit centers and park and Ride facilities within the region.

The City will work with RTD to provide secure bicycle parking at transit stops throughout the City.

The City will work with RTD to ensure that all Boulder transit routes accommodate bikes on buses by 1996.

In order to help increase bicycle mode share, the City will continue to promote bicycling through a variety of encouragement and transportation demand management (TDM) programs.

These programs are designed to disseminate information on the bicycle system, to inform citizens of the benefits of commuting by bicycle, to foster support of bicycling at the work place and to actively encourage people to ride their bicycles.

In addition, bicycle-related TDM programs can have a significant impact on mode choice by encouraging employer support of bicycling. These programs combine both City-and employer-based efforts to provide the necessary support facilities, environment and incentives for employees to use alternative modes as a commute option.
City policies for encouragement and TDM programs are shown in figure 6-19.

education and enforcement

Education and enforcement efforts remain important as a means to promote effective use of the system and to better inform both cyclists and motorists of their rights and responsibilities. Educational efforts are fundamental to instill more safe and courteous use of the shared public roadway and to inform the public of the laws regarding the interaction between modes. Enforcement efforts are important to further enhance public safety and to provide support for educational programs.

As part of this effort, the City will continue to expand on the educational programs coordinated through GO Boulder. These programs include work with the Boulder Valley School District (BVSD), the University of Colorado (CU), initiation of a "Share the Road" Campaign, work with the State of Colorado to include questions on the

figure 6-19. encouragement and tdm policies

The City will continue to expand upon Bike Week events. (1989 TMP)

The City will assist employers in establishing an employee transportation coordinator (ETC) whose job is to disseminate information on alternative transportation, including the bicycle system, and to increase awareness and support of alternative modes within the workplace. (1989 TMP)

The City will encourage or assist employers to provide secure and convenient bicycle parking, showers and lockers and the workplace. (1989 TMP)

The City will collaborate with manufacturers, retailers and employers to offer discounts on bicycling gear for employees who bike to work.

The City will involve bicycle shops and organizations in community education by utilizing their expertise to sponsor maintenance clinics, training rides and other events.

The City will allow developers a reduction in minimum automobile parking space requirements in exchange for commitments to increased bicycle access and bicycle mode share, such as bike parking, shower and locker facilities, and employee incentive programs.

appropriate behavior of motorists towards bicyclists and pedestrians as part of the State Motor Vehicle test, and development of a"Driving with Bicyclists" seminar to better inform automobile drivers on how to share the road with cyclists.

The City will also work with the Police Department to further enhance public safety.

City policies on education and enforcement programs are shown in figure 6-20. All of the education and enforcement programs are discusses in greater detail in section 6.4.

figure 6-20. education and enforcement policies

The City will continue to work with BVSD to present bicycle safety rodeos and transportation safety assemblies designed to teach safe riding habits and the rules of the road to young cyclists. (1989 TMP)

The City will place brochures in packets going to CU students, bicycle stores and public places which contain information about sharing the roads along with transit routes and schedules and bicycle facility maps. (1989 TMP)

The City will work with the state legislature to add a non-motorized portion to the State Motor Vehicle test which includes questions on appropriate behavior of motorized vehicles towards bicyclists and pedestrians. (1989 TMP)

The City will combine education and enforcement efforts to help instill safe and courteous use of the shared public roadway.

The City will establish a “Close Call” Hot Line to better identify high hazard locations and to pinpoint violations which lead to accidents.

The City will collaborate with the Boulder Valley School District (BVSD), the University of Colorado, and private and public driving schools to better educate students on how to properly share the road with bicyclists, pedestrians and users of transits.

The City will work with the University of Colorado to provide materials and instruction on bicycle safety and the “share the road” campaign and to institute a mandatory orientation session on these issues for all incoming students.

The City will develop a strong “Share the Road” public education campaign to foster increased courtesy and respect among all modes.

The City will develop a "Driving with Bicyclists" seminar which teaches automobile drivers about sharing the road with cyclists, emphasizing the rights and responsibilities of all road users. This will be available to the general public, to professional drivers, and for motorists who commit traffic violations involving cyclists.